

Syngenta Crop Protection, Inc.
Post Office Box 18300
Greensboro, NC 27419

In Case of Emergency, Call
1-800-888-8372

1. PRODUCT IDENTIFICATION

Product Name:	SUBDUE GR	Product No.:	A9603A
EPA Signal Word:	Caution		
Active Ingredient(%):	Mefenoxam (1.0%)	CAS No.:	70630-17-0
Chemical Name:	(R)-2-[(2,6-dimethylphenyl)-methoxyacetyl-amino]-propionic acid methyl ester		
Chemical Class:	Phenylamide Fungicide		
EPA Registration Number(s):	100-794	Section(s) Revised:	2, 3, 8

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen
Attapulgite Clay	Not Established	Not Established	2 mg/m ³ *	No
Crystalline Silica, Quartz	10 mg/m ³ /(%SiO ₂ +2) (respirable dust)	0.1 mg/m ³ (respirable silica)	Not Established	IARC Group 2A
n-Methylpyrrolidone (not to exceed 4%)	Not Established	Not Established	10 ppm TWA****	No
Mefenoxam (1.0%)	Not Established	Not Established	Not Established	No

* recommended by manufacturer

**** Recommended by AIHA (American Industrial
Hygiene Association)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

3. HAZARDS IDENTIFICATION

Symptoms of Acute Exposure

Harmful if inhaled or swallowed. Dust, mist or vapor irritating to eyes and respiratory tract. May cause skin irritation.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: Reddish-brown granules
Odor: Sweet aromatic

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

4. FIRST AID MEASURES

Have the product container, label or Material Safety Data Sheet with you when calling Syngenta (800-888-8372), a poison control center or doctor, or going for treatment.

Ingestion: If swallowed: Call Syngenta (800-888-8372), a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so

after calling 800-888-8372 or by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

- Eye Contact:** If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Skin Contact:** If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call Syngenta (800-888-8372), a poison control center or doctor for treatment advice.
- Inhalation:** If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call Syngenta (800-888-8372), a poison control center or doctor for further treatment advice.

Notes to Physician

There is no specific antidote if this product is ingested.

Treat symptomatically.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

- | | | |
|------------------------------|-------------------------|-------------------------|
| Flash Point (Test Method): | Not Applicable | |
| Flammable Limits (% in Air): | Lower: % Not Applicable | Upper: % Not Applicable |
| Autoignition Temperature: | Not Available | |
| Flammability: | Not Flammable | |

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire

Use dry chemical, foam or CO2 extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. If a solid, sweep up material and place in a compatible disposal container. If a liquid, cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

- Ingestion:** Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
- Eye Contact:** Where eye contact is likely, use chemical splash goggles.

- Skin Contact:** Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.
- Inhalation:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance:** Reddish-brown granules
- Odor:** Sweet aromatic
- Melting Point:** Not Available
- Boiling Point:** Not Applicable
- Specific Gravity/Density:** 38.00 lbs./cu.ft.
- pH:** 7-9 (1% solution in H₂O @ 77°F (25°C))

Solubility in H₂O

- Mefenoxam: 26 g/l @ 77°F (25°C)

Vapor Pressure

- Mefenoxam: 2.5 x 10⁽⁻⁵⁾ mmHg @ 77°F (25°C)

10. STABILITY AND REACTIVITY

- Stability:** Stable under normal use and storage conditions.
- Hazardous Polymerization:** Will not occur.
- Conditions to Avoid:** None known.
- Materials to Avoid:** None known.
- Hazardous Decomposition Products:** Can decompose at high temperatures forming toxic gases.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

- Ingestion:** Practically Non-Toxic
Oral (LD₅₀ Rat) : > 5,000 mg/kg body weight
- Dermal:** Slightly Toxic
Dermal (LD₅₀ Rabbit) : > 2,000 mg/kg body weight
- Inhalation:** Slightly Toxic
Inhalation (LC₅₀ Rat) : 0.776 mg/l air - 4 hours
- Eye Contact:** Minimally Irritating (Rabbit)
- Skin Contact:** Slightly Irritating (Rabbit)
- Skin Sensitization:** Not a Sensitizer (Guinea Pig)

Reproductive/Developmental Effects

- Mefenoxam: None observed.

Chronic/Subchronic Toxicity Studies

- Mefenoxam: Liver effects at high dose levels.

Carcinogenicity

- Mefenoxam: None observed.

Other Toxicity Information

None.

Toxicity of Other Components

Attapulgit Clay

Repeated and prolonged inhalation may cause delayed injury to lungs (silicosis). Exposure may result in shortness of breath, cough, and sputum production.

n-Methylpyrrolidone (not to exceed 4%)

May cause respiratory tract irritation. Repeated or prolonged exposure may cause drying and cracking of the skin.

Target Organs

Active Ingredients

Mefenoxam: Liver

Inert Ingredients

Attapulgit Clay: Respiratory tract

n-Methylpyrrolidone: Eye, skin

12. ECOLOGICAL INFORMATION

Summary of Effects

Mefenoxam:

Practically non-toxic to aquatic organisms and wildlife.

Eco-Acute Toxicity

Mefenoxam: Bees LC50/EC50 > 25 ug/bee
Invertebrates (water flea) LC50/EC50 > 113 ppm
Fish (Trout) LC50/EC50 > 121 ppm
Birds (8-day dietary - Bobwhite Quail) LC50/EC50 5,620 ppm

Eco-Chronic Toxicity

Mefenoxam: Not Available

Environmental Fate

Mefenoxam:

No data available for the formulation. The information presented here is for the active ingredient, mefenoxam. A thorough review of environmental information is not possible in this document.

Persistence (Half-Life): Soil: 73.5 days. Water: Stable @ pH 5-7; 116 days @ pH 9.

Photolysis (Half-Life) Soil: 248 days. Water: Stable.

Leaching/Mobility: Low to very high mobility (Koc = 1299-20).

Soil Metabolism: t1/2 = degrades slowly under anaerobic soil conditions.

Action in Water (after 24 hrs.): Mixes then sinks.

13. DISPOSAL CONSIDERATIONS

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Surface Transportation: Not regulated by DOT.

Air Transportation: Not regulated.

Water Transportation: Not regulated.

Fungicides, NOI, O/T poison

None.

EPCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard
Chronic Health Hazard

Section 313 Toxic Chemicals: n-Methylpyrrolidone (not to exceed 4%) (CAS No. 872-50-4)

No Proposition 65 warning is required.

None

Not Applicable

Exempt from TSCA, subject to FIFRA

NFPA Hazard Ratings

Health:	1
Flammability:	1
Instability:	0

HMIS Hazard Ratings

Health:	1
Flammability:	1
Reactivity:	0

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:

1-800-334-9481

Original Issued Date: 09/02/1997

Revision Date: 01/02/2003

Replaces: 05/10/2002

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

RSVP# : SCP-955-794B-00140H

End of MSDS